

# **Energy and Related Products**

**Cynthia B. Foreso, Coordinator  
(202) 205-3348  
[cynthia.foreso@usitc.gov](mailto:cynthia.foreso@usitc.gov)**

## **Change in 2005 from 2004:**

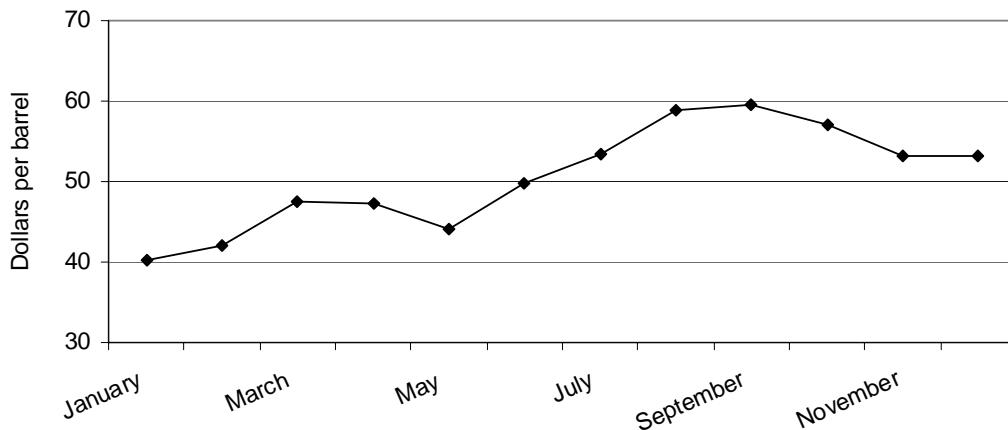
**U.S. trade deficit: Increased by \$69.5 billion (40 percent) to \$243.3 billion**

**U.S. exports: Increased by \$8.1 billion (37 percent) to \$29.9 billion**

**U.S. imports: Increased by \$77.6 billion (40 percent) to \$273.2 billion**

In 2005, the overall U.S. trade deficit in energy-related products<sup>1</sup> increased primarily because of increasing prices for crude petroleum and natural gas (table EP-1).<sup>2</sup> World prices for crude petroleum rose from an average of \$36.65 per barrel in 2004 to \$53.66 per barrel in 2005 (figure EP-1 shows the fluctuations in the 2005 price). During the same period, U.S. natural gas prices increased from an average of \$5.49 per thousand cubic feet to \$7.91 per thousand cubic feet. In terms of quantity, U.S. imports of both crude petroleum and natural gas actually declined from 2004 to 2005 while U.S. imports of petroleum products increased.

**Figure EP-1**  
**Monthly crude petroleum prices (West Texas Intermediate benchmark), 2005**



Source: Derived from official statistics of the U.S. Department of Energy.

<sup>1</sup> Energy and related products includes crude petroleum, petroleum products, natural gas (pipeline natural and liquefied natural gas), coal and related products, and electricity. Crude petroleum, petroleum products, and natural gas are discussed separately in this chapter.

<sup>2</sup> Historically, the United States has had a trade deficit in the energy sector because of steadily increasing consumption and continued stagnant domestic production.

Table EP-1

Energy-related products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005<sup>1</sup>

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004	
						Absolute	Percent
Million dollars							
U.S. exports of domestic merchandise:							
Canada . . . . .	3,862	2,889	4,296	5,754	8,487	2,732	47.5
Mexico . . . . .	3,296	3,274	2,897	3,379	5,508	2,129	63.0
Venezuela . . . . .	111	121	184	170	202	32	18.6
Nigeria . . . . .	24	37	22	28	38	10	34.6
Saudi Arabia . . . . .	37	34	38	48	57	9	18.7
United Kingdom . . . . .	278	201	206	464	834	370	79.8
Russia . . . . .	216	231	125	26	81	55	217.5
Algeria . . . . .	16	19	23	25	30	5	20.1
Angola . . . . .	1	3	3	1	2	(2)	24.6
Iraq . . . . .	0	0	(2)	(2)	(2)	(2)	-76.7
All other . . . . .	7,231	7,622	8,843	11,887	14,655	2,768	23.3
Total . . . . .	15,073	14,431	16,639	21,783	29,892	8,110	37.2
EU-15 . . . . .	2,146	1,731	1,714	3,068	3,891	823	26.8
EU-25 . . . . .	2,152	1,738	1,723	3,073	3,957	883	28.7
OPEC . . . . .	273	300	384	384	518	134	34.9
Latin America . . . . .	5,161	5,290	6,159	7,249	11,644	4,396	60.6
CBERA . . . . .	1,026	1,213	2,271	2,331	3,264	933	40.0
Asia . . . . .	2,793	3,305	3,348	4,442	4,117	-324	-7.3
Sub-Saharan Africa . . . . .	149	193	166	187	233	46	24.7
Central and Eastern Europe . . . . .	40	30	50	102	253	150	147.1
U.S. imports of merchandise for consumption:							
Canada . . . . .	34,598	29,903	41,579	49,278	66,116	16,838	34.2
Mexico . . . . .	9,103	11,567	14,792	18,966	25,029	6,063	32.0
Venezuela . . . . .	12,030	11,798	13,791	20,261	28,016	7,756	38.3
Nigeria . . . . .	8,627	5,773	10,028	16,233	23,713	7,480	46.1
Saudi Arabia . . . . .	10,625	10,264	14,538	17,851	23,268	5,417	30.3
United Kingdom . . . . .	3,298	4,399	5,436	6,071	8,298	2,228	36.7
Russia . . . . .	1,746	2,591	3,932	4,935	8,471	3,536	71.6
Algeria . . . . .	2,030	1,827	3,365	5,435	8,517	3,082	56.7
Angola . . . . .	2,769	3,204	4,137	4,432	8,393	3,962	89.4
Iraq . . . . .	3,735	2,748	3,297	6,496	7,008	512	7.9
All other . . . . .	25,665	25,726	32,288	45,596	66,367	20,771	45.6
Total . . . . .	114,226	109,800	147,183	195,553	273,197	77,644	39.7
EU-15 . . . . .	7,614	8,778	11,453	15,007	21,352	6,344	42.3
EU-25 . . . . .	7,884	9,143	12,029	15,972	22,503	6,531	40.9
OPEC . . . . .	39,424	34,506	47,416	69,981	95,878	25,898	37.0
Latin America . . . . .	29,945	32,598	41,240	56,061	77,970	21,909	39.1
CBERA . . . . .	2,689	2,900	4,600	6,342	9,387	3,045	48.0
Asia . . . . .	2,720	2,284	2,611	3,928	5,348	1,420	36.2
Sub-Saharan Africa . . . . .	14,271	11,713	17,674	26,299	40,327	14,028	53.3
Central and Eastern Europe . . . . .	131	201	168	233	297	63	27.2

See footnote(s) at end of table.

Table EP-1—Continued

Energy-related products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005<sup>1</sup>

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004	
						Absolute	Percent
Million dollars							
U.S. merchandise trade balance:							
Canada . . . . .	-30,736	-27,014	-37,283	-43,524	-57,629	-14,105	-32.4
Mexico . . . . .	-5,807	-8,294	-11,894	-15,587	-19,522	-3,935	-25.2
Venezuela . . . . .	-11,919	-11,677	-13,607	-20,090	-27,814	-7,724	-38.4
Nigeria . . . . .	-8,603	-5,736	-10,006	-16,205	-23,675	-7,470	-46.1
Saudi Arabia . . . . .	-10,588	-10,230	-14,500	-17,803	-23,211	-5,408	-30.4
United Kingdom . . . . .	-3,020	-4,197	-5,230	-5,607	-7,464	-1,857	-33.1
Russia . . . . .	-1,531	-2,360	-3,806	-4,910	-8,390	-3,480	-70.9
Algeria . . . . .	-2,014	-1,808	-3,342	-5,410	-8,487	-3,077	-56.9
Angola . . . . .	-2,767	-3,201	-4,133	-4,430	-8,391	-3,961	-89.4
Iraq . . . . .	-3,735	-2,748	-3,297	-6,495	-7,008	-513	-7.9
All other . . . . .	-18,434	-18,103	-23,445	-33,709	-51,712	-18,003	-53.4
Total . . . . .	-99,153	-95,369	-130,544	-173,770	-243,304	-69,534	-40.0
EU-15 . . . . .	-5,468	-7,048	-9,738	-11,939	-17,460	-5,521	-46.2
EU-25 . . . . .	-5,732	-7,405	-10,307	-12,899	-18,547	-5,648	-43.8
OPEC . . . . .	-39,152	-34,206	-47,033	-69,596	-95,360	-25,763	-37.0
Latin America . . . . .	-24,784	-27,308	-35,081	-48,812	-66,326	-17,513	-35.9
CBERA . . . . .	-1,664	-1,687	-2,328	-4,011	-6,123	-2,112	-52.6
Asia . . . . .	73	1,022	737	514	-1,230	-1,745	( <sup>3</sup> )
Sub-Saharan Africa . . . . .	-14,122	-11,520	-17,508	-26,112	-40,094	-13,982	-53.5
Central and Eastern Europe . . . . .	-91	-171	-118	-131	-44	87	66.5

<sup>1</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>2</sup>Less than \$500,000.

<sup>3</sup>Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2005.

Source: Compiled from official statistics of the U.S. Department of Commerce.

The rise in crude petroleum prices was attributable to continued tight supplies on the world market resulting from several factors, including reductions in spare production capacity, labor unrest in Venezuela and Nigeria, fears over the possible effects of hurricanes on the U.S. Gulf of Mexico production, and the continued war in Iraq. Increased global demand for crude petroleum has outstripped the supply in recent years, decreasing spare production capacity. For example, in 2005, there was approximately 1.6 million to 2.0 million barrels per day (b/d) of extra production capacity in the world, compared with 3 million b/d of excess capacity available in 2004.<sup>3</sup>

The energy-related products with the largest year-to-year shifts (table EP-2), in terms of value, included increased U.S. exports of petroleum products, natural gas, and coal and increased imports of crude petroleum, petroleum products, and natural gas. Analyses of these shifts for crude petroleum, petroleum products, and natural gas are presented later in this chapter.

U.S. exports of coal rose by about 4 percent to 50 million short tons in 2005.<sup>4</sup> U.S. imports of coal increased by about 12 percent to 30 million short tons in 2005. Nearly all of the rise in imports was accounted for by West Coast power plants, which continued to increase coal consumption in response to rising crude petroleum and natural gas prices.

---

<sup>3</sup> DOE, Energy Information Administration, *Short-Term Energy Outlook*.

<sup>4</sup> The United States accounts for the largest share of the world's recoverable coal reserves (25 percent) and is a major world exporter of coal.

**Table EP-2**  
**Leading changes in U.S. exports and imports of energy-related products, 2001–2005<sup>1</sup>**

Industry/commodity group	2001	2002	2003	2004	2005	Change, 2005 from 2004						
						Absolute	Percent					
<i>Million dollars</i>												
<b>U.S. EXPORTS:</b>												
<b>Increases:</b>												
Petroleum products (CH005) .....	8,936	8,662	9,783	12,651	18,302	5,651	44.7					
Natural gas and components (CH006) .....	1,109	1,675	2,074	2,906	4,045	1,139	39.2					
Coal, coke, and related chemical products (CH003) ...	2,354	2,188	2,360	3,556	4,318	761	21.4					
Crude petroleum (CH004) .....	177	92	155	265	627	362	136.5					
<b>All other</b> .....	<b>2,497</b>	<b>1,813</b>	<b>2,267</b>	<b>2,404</b>	<b>2,601</b>	<b>197</b>	<b>8.2</b>					
<b>TOTAL</b> .....	<b>15,073</b>	<b>14,431</b>	<b>16,639</b>	<b>21,783</b>	<b>29,892</b>	<b>8,110</b>	<b>37.2</b>					
<b>U.S. IMPORTS:</b>												
<b>Increases:</b>												
Crude petroleum (CH004) .....	49,673	54,704	73,527	100,338	137,331	36,993	36.9					
Petroleum products (CH005) .....	34,372	30,594	37,280	51,579	77,684	26,105	50.6					
Natural gas and components (CH006) .....	23,054	18,609	28,885	34,195	46,211	12,016	35.1					
Electrical energy (CH001) .....	2,681	1,160	1,382	1,261	2,479	1,218	96.6					
Coal, coke, and related chemical products (CH003) ...	2,411	2,589	3,217	5,555	6,316	761	13.7					
<b>All other</b> .....	<b>2,036</b>	<b>2,144</b>	<b>2,892</b>	<b>2,625</b>	<b>3,175</b>	<b>550</b>	<b>21.0</b>					
<b>TOTAL</b> .....	<b>114,226</b>	<b>109,800</b>	<b>147,183</b>	<b>195,553</b>	<b>273,197</b>	<b>77,644</b>	<b>39.7</b>					

<sup>1</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

Note.—Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

# **Crude Petroleum**

---

## **Change in 2005 from 2004:**

**U.S. trade deficit: Increased by \$36.6 billion (37 percent) to \$136.7 billion**

**U.S. exports: Increased by \$362 million (137 percent) to \$627 million**

**U.S. imports: Increased by \$37.0 billion (37 percent) to \$137.3 billion**

The U.S. trade deficit in crude petroleum increased by 37 percent from 2004 to 2005 because of rising crude petroleum prices, which increased from an average of \$36.65 per barrel in 2004 to \$53.66 per barrel in 2005. World prices for crude petroleum increased as a result of a combination of factors, primarily increased global demand, reduced production by OPEC (especially in Venezuela, Nigeria, and Iraq), and an increase in demand because of economic growth in developing Asian countries.<sup>5</sup>

## **U.S. exports**

The quantity of U.S. crude petroleum exports, which accounts for less than 1 percent of U.S. production and less than 0.05 percent of U.S. consumption, increased from 27,000 b/d in 2004 to 41,000 b/d in 2005.<sup>6</sup> Historically, Canada, which accounted for 97 percent of the total quantity of U.S. crude petroleum exports in 2005, has been the only consistent market for these exports, with the level of exports fluctuating based on refinery needs on either side of the border.

## **U.S. imports**

U.S. imports of crude petroleum declined slightly from 10.09 million b/d in 2004 to 10.06 million b/d in 2005, or by 0.3 percent. Canada, Mexico, Nigeria, Venezuela, and Saudi Arabia were the leading sources of U.S. imports of crude petroleum in 2005 (table EP-3). OPEC, which accounts for nearly 70 percent of the world's reserves and 40 percent of the world's production of crude petroleum, was again the largest supplier to the U.S. market, accounting for 47 percent of the total quantity of U.S. imports of crude petroleum. U.S. imports of crude petroleum continued to account for more than 60 percent of domestic consumption.

**Cynthia B. Foreso**

**(202) 205-3348**

**cynthia.foreso@usitc.gov**

---

<sup>5</sup> DOE, Energy Information Administration, *Short-Term Energy Outlook*.

<sup>6</sup> U.S. exports of crude petroleum have been prohibited since 1973, except as approved by the U.S. Government. Canada has been the only consistent market for these exports, which are part of a commercial exchange agreement between U.S. and Canadian refiners that has been approved by the Secretary of the Department of Energy. In May 1996, the President determined that allowing exports of Alaskan North Slope (ANS) crude was in the national interest, thus ending the 23-year ban on ANS crude exports. However, the President can impose new export restrictions in the event of severe crude petroleum shortages.

Table EP-3

Crude petroleum (CH004): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005<sup>1</sup>

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004	
						Absolute	Percent
Million dollars							
U.S. exports of domestic merchandise:							
Canada . . . . .	176	90	154	237	606	369	155.4
Mexico . . . . .	( <sup>2</sup> )	1	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	657.0
Nigeria . . . . .	0	0	0	0	0	0	0.0
Venezuela . . . . .	0	0	( <sup>2</sup> )	0	0	0	0.0
Saudi Arabia . . . . .	0	( <sup>2</sup> )	0	0	0	0	0.0
Angola . . . . .	0	0	0	0	0	0	0.0
Ecuador . . . . .	0	0	0	0	20	20	( <sup>3</sup> )
Colombia . . . . .	0	0	0	0	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>3</sup> )
Gabon . . . . .	0	0	0	0	0	0	0.0
Iraq . . . . .	0	0	0	0	0	0	0.0
All other . . . . .	1	( <sup>2</sup> )	1	28	1	-27	-98.0
Total . . . . .	177	92	155	265	627	362	136.5
EU-15 . . . . .	( <sup>2</sup> )	-25.4					
EU-25 . . . . .	( <sup>2</sup> )	-25.4					
OPEC . . . . .	0	( <sup>2</sup> )	( <sup>2</sup> )	0	0	0	0.0
Latin America . . . . .	( <sup>2</sup> )	2	( <sup>2</sup> )	( <sup>2</sup> )	20	20	27,195.2
CBERA . . . . .	( <sup>2</sup> )	( <sup>2</sup> )	0	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	873.4
Asia . . . . .	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	28	( <sup>2</sup> )	-27	-98.2
Sub-Saharan Africa . . . . .	0	0	0	0	0	0	0.0
Central and Eastern Europe . . . . .	0	0	0	0	0	0	0.0
U.S. imports of merchandise for consumption:							
Canada . . . . .	10,121	11,196	14,086	18,888	24,120	5,232	27.7
Mexico . . . . .	7,957	10,490	13,630	17,186	22,364	5,178	30.1
Nigeria . . . . .	6,844	5,388	9,275	15,377	21,911	6,534	42.5
Venezuela . . . . .	6,602	6,760	8,040	11,645	16,023	4,379	37.6
Saudi Arabia . . . . .	4,805	4,742	7,378	9,178	11,612	2,433	26.5
Angola . . . . .	2,651	3,060	3,981	4,240	8,115	3,875	91.4
Ecuador . . . . .	668	831	1,355	2,709	4,274	1,565	57.8
Colombia . . . . .	787	1,161	2,135	2,634	3,140	505	19.2
Gabon . . . . .	1,457	1,523	1,888	2,378	2,829	451	19.0
Iraq . . . . .	2,186	1,686	1,813	2,821	2,808	-13	-0.5
All other . . . . .	5,596	7,866	9,944	13,280	20,135	6,854	51.6
Total . . . . .	49,673	54,704	73,527	100,338	137,331	36,993	36.9
EU-15 . . . . .	842	1,867	2,023	1,669	2,718	1,050	62.9
EU-25 . . . . .	842	1,867	2,023	1,669	2,718	1,050	62.9
OPEC . . . . .	21,453	19,805	28,282	42,298	57,019	14,721	34.8
Latin America . . . . .	17,008	20,875	27,209	36,656	49,482	12,826	35.0
CBERA . . . . .	440	760	930	1,039	1,277	238	22.9
Asia . . . . .	409	458	390	646	758	112	17.3
Sub-Saharan Africa . . . . .	11,763	10,770	16,388	24,614	37,069	12,455	50.6
Central and Eastern Europe . . . . .	0	0	0	0	55	55	( <sup>3</sup> )

See footnote(s) at end of table.

Table EP-3—Continued

Crude petroleum (CH004): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005<sup>1</sup>

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004	
						Absolute	Percent
Million dollars							
U.S. merchandise trade balance:							
Canada . . . . .	-9,945	-11,106	-13,932	-18,651	-23,514	-4,863	-26.1
Mexico . . . . .	-7,957	-10,488	-13,630	-17,186	-22,364	-5,178	-30.1
Nigeria . . . . .	-6,844	-5,388	-9,275	-15,377	-21,911	-6,534	-42.5
Venezuela . . . . .	-6,602	-6,760	-8,040	-11,645	-16,023	-4,379	-37.6
Saudi Arabia . . . . .	-4,805	-4,742	-7,378	-9,178	-11,612	-2,433	-26.5
Angola . . . . .	-2,651	-3,060	-3,981	-4,240	-8,115	-3,875	-91.4
Ecuador . . . . .	-668	-831	-1,355	-2,709	-4,254	-1,545	-57.0
Colombia . . . . .	-787	-1,161	-2,135	-2,634	-3,140	-505	-19.2
Gabon . . . . .	-1,457	-1,523	-1,888	-2,378	-2,829	-451	-19.0
Iraq . . . . .	-2,186	-1,686	-1,813	-2,821	-2,808	13	0.5
All other . . . . .	-5,595	-7,866	-9,943	-13,253	-20,134	-6,881	-51.9
Total . . . . .	-49,496	-54,612	-73,372	-100,073	-136,704	-36,632	-36.6
EU-15 . . . . .	-842	-1,867	-2,023	-1,669	-2,718	-1,050	-62.9
EU-25 . . . . .	-842	-1,867	-2,023	-1,669	-2,718	-1,050	-62.9
OPEC . . . . .	-21,453	-19,805	-28,282	-42,298	-57,019	-14,721	-34.8
Latin America . . . . .	-17,008	-20,874	-27,209	-36,656	-49,462	-12,806	-34.9
CBERA . . . . .	-440	-760	-930	-1,039	-1,277	-238	-22.9
Asia . . . . .	-408	-457	-389	-618	-757	-139	-22.4
Sub-Saharan Africa . . . . .	-11,763	-10,770	-16,388	-24,614	-37,069	-12,455	-50.6
Central and Eastern Europe . . . . .	0	0	0	0	-55	-55	( <sup>3</sup> )

<sup>1</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>2</sup>Less than \$500,000.

<sup>3</sup>Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2005.

Source: Compiled from official statistics of the U.S. Department of Commerce.

# Petroleum Products

---

## Change in 2005 from 2004:

**U.S. trade deficit: Increased by \$20.5 billion (53 percent) to \$59.4 billion**

**U.S. exports: Increased by \$5.7 billion (45 percent) to \$18.3 billion**

**U.S. imports: Increased by \$26.1 billion (51 percent) to \$77.7 billion**

The U.S. trade deficit in petroleum products increased by \$20.5 billion, or 53 percent from 2004 to 2005 as a result of the rise in the average per barrel price for crude petroleum on the world market (see Crude Petroleum for further information). The United States is a major world producer and consumer of petroleum products.

## U.S. exports

The United States is not a major world exporter of petroleum products, producing primarily for domestic consumption. In terms of quantity, U.S. exports of petroleum products are minimal, accounting for less than 5 percent (1.0 million b/d) of total U.S. production in 2005. The quantity of U.S. exports of petroleum products, primarily distillate and residual fuel oils to Mexico and Canada, increased by about 5 percent in 2005.

## U.S. imports

Although the value of U.S. imports of petroleum products in 2005 increased by 51 percent (table EP-4), the quantity of these imports increased by only 14 percent to 3.5 million b/d. U.S. imports of petroleum products, on average, account for less than 10 percent of domestic consumption. The primary sources of U.S. imports of petroleum products in 2005 continued to be Canada, Venezuela, and Saudi Arabia. Distillate and residual fuel oils, used primarily as heating, bunker, and diesel fuels, accounted for nearly all of the quantity increase in U.S. imports. Increased demand for these fuels in 2005 was due to growth in the industrial sector and on-highway diesel fuel consumption.<sup>7</sup>

Cynthia B. Foreso

(202) 205-3348

cynthia.foreso@usitc.gov

---

<sup>7</sup> DOE, Energy Information Administration, *Short-Term Energy Outlook*.

Table EP-4

Petroleum products (CH005): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005<sup>1</sup>

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004	
						Absolute	Percent
Million dollars							
U.S. exports of domestic merchandise:							
Canada . . . . .	1,358	1,240	1,432	1,725	2,605	880	51.0
Venezuela . . . . .	106	116	177	165	185	20	12.0
Saudi Arabia . . . . .	36	33	36	45	52	7	16.0
Mexico . . . . .	2,677	2,346	2,318	2,799	4,781	1,982	70.8
Russia . . . . .	20	21	23	22	38	16	70.5
United Kingdom . . . . .	117	82	54	198	471	273	138.2
Netherlands . . . . .	395	202	148	547	497	-51	-9.3
Algeria . . . . .	4	3	3	1	1	(2)	14.6
Aruba . . . . .	32	55	25	74	63	-11	-15.2
Iraq . . . . .	0	0	(2)	(2)	(2)	(2)	-70.1
All other . . . . .	4,191	4,565	5,567	7,074	9,609	2,535	35.8
Total . . . . .	8,936	8,662	9,783	12,651	18,302	5,651	44.7
EU-15 . . . . .	1,102	862	713	1,770	1,885	115	6.5
EU-25 . . . . .	1,105	868	721	1,774	1,930	156	8.8
OPEC . . . . .	241	262	337	340	441	101	29.8
Latin America . . . . .	4,248	4,066	5,281	6,251	10,378	4,127	66.0
CBERA . . . . .	981	1,138	2,174	2,261	3,174	912	40.4
Asia . . . . .	1,513	1,654	1,610	2,010	2,360	349	17.4
Sub-Saharan Africa . . . . .	129	172	139	157	211	55	34.9
Central and Eastern Europe . . . . .	21	16	23	36	30	-6	-15.7
U.S. imports of merchandise for consumption:							
Canada . . . . .	4,287	4,258	5,479	6,747	8,977	2,230	33.0
Venezuela . . . . .	4,593	3,950	4,152	6,382	9,161	2,778	43.5
Saudi Arabia . . . . .	4,149	3,833	4,734	5,739	8,073	2,334	40.7
Mexico . . . . .	885	806	1,086	1,698	2,500	802	47.2
Russia . . . . .	806	1,445	2,107	2,929	5,741	2,812	96.0
United Kingdom . . . . .	1,759	1,764	2,315	3,352	4,432	1,080	32.2
Netherlands . . . . .	477	638	1,000	1,662	3,421	1,758	105.8
Algeria . . . . .	1,061	898	1,235	1,742	2,857	1,115	64.0
Aruba . . . . .	675	605	752	1,530	2,715	1,185	77.5
Iraq . . . . .	1,110	689	957	2,194	2,660	466	21.2
All other . . . . .	14,568	11,706	13,463	17,602	27,147	9,545	54.2
Total . . . . .	34,372	30,594	37,280	51,579	77,684	26,105	50.6
EU-15 . . . . .	5,532	5,464	7,067	10,925	16,020	5,094	46.6
EU-25 . . . . .	5,784	5,818	7,629	11,702	17,037	5,335	45.6
OPEC . . . . .	13,280	10,441	12,605	17,881	26,281	8,400	47.0
Latin America . . . . .	10,288	8,868	9,891	13,575	20,722	7,147	52.6
CBERA . . . . .	1,635	1,510	1,862	2,624	4,751	2,127	81.0
Asia . . . . .	1,951	1,318	1,594	2,053	3,484	1,431	69.7
Sub-Saharan Africa . . . . .	1,860	725	862	1,149	2,528	1,379	120.0
Central and Eastern Europe . . . . .	112	190	159	57	125	68	118.1

See footnote(s) at end of table.

Table EP-4—Continued

Petroleum products (CH005): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005<sup>1</sup>

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004	
						Absolute	Percent
Million dollars							
U.S. merchandise trade balance:							
Canada . . . . .	-2,929	-3,019	-4,047	-5,022	-6,372	-1,350	-26.9
Venezuela . . . . .	-4,487	-3,834	-3,975	-6,217	-8,976	-2,759	-44.4
Saudi Arabia . . . . .	-4,113	-3,800	-4,698	-5,694	-8,021	-2,327	-40.9
Mexico . . . . .	1,791	1,540	1,232	1,101	2,281	1,180	107.2
Russia . . . . .	-786	-1,424	-2,084	-2,907	-5,703	-2,796	-96.2
United Kingdom . . . . .	-1,642	-1,682	-2,261	-3,155	-3,962	-807	-25.6
Netherlands . . . . .	-82	-436	-853	-1,115	-2,924	-1,809	-162.2
Algeria . . . . .	-1,057	-895	-1,231	-1,741	-2,856	-1,115	-64.1
Aruba . . . . .	-643	-551	-728	-1,455	-2,652	-1,197	-82.2
Iraq . . . . .	-1,110	-689	-957	-2,194	-2,660	-466	-21.2
All other . . . . .	-10,377	-7,141	-7,896	-10,528	-17,538	-7,010	-66.6
Total . . . . .	-25,436	-21,931	-27,497	-38,928	-59,382	-20,454	-52.5
EU-15 . . . . .	-4,431	-4,602	-6,354	-9,155	-14,135	-4,980	-54.4
EU-25 . . . . .	-4,678	-4,950	-6,908	-9,928	-15,107	-5,179	-52.2
OPEC . . . . .	-13,039	-10,179	-12,267	-17,541	-25,840	-8,299	-47.3
Latin America . . . . .	-6,041	-4,803	-4,610	-7,324	-10,345	-3,020	-41.2
CBERA . . . . .	-654	-373	312	-363	-1,577	-1,214	-334.6
Asia . . . . .	-439	336	16	-42	-1,124	-1,082	-2,573.8
Sub-Saharan Africa . . . . .	-1,731	-553	-722	-992	-2,316	-1,324	-133.5
Central and Eastern Europe . . . . .	-91	-174	-136	-22	-95	-73	-337.9

<sup>1</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>2</sup>Less than \$500,000.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2005.

Source: Compiled from official statistics of the U.S. Department of Commerce.

# **Natural Gas and Components**

---

## **Change in 2005 from 2004:**

**U.S. trade deficit: Increased by \$10.9 billion (35 percent) to \$42.2 billion**

**U.S. exports: Increased by \$1.1 billion (39 percent) to \$4.0 billion**

**U.S. imports: Increased by \$12.0 billion (35 percent) to \$46.2 billion**

The trade deficit for natural gas and components increased primarily because of the rise in the price of natural gas in 2005, which rose from an average of \$5.49 per thousand cubic feet in 2004 to \$7.91 per thousand cubic feet in 2005 because of continued tight supplies and low inventories resulting from hurricane induced supply disruptions and an unusually cold winter (2004-05). Most of the U.S. trade in natural gas is via pipelines shared with Canada and, to a lesser extent, Mexico, with imports and exports fluctuating from year to year based on market availability along the pipeline (table EP-5). Liquefied natural gas (LNG) is also traded, accounting for a much smaller share of total trade.

## **U.S. exports**

U.S. exports of natural gas and components account for a minimal share of U.S. production. The quantity of exports of natural gas and components decreased by 9 percent, from 854 billion cubic feet in 2004 to 780 billion cubic feet in 2005. Exports regularly fluctuate along the U.S.-Canadian shared pipeline based on market availability. U.S. exports of pipeline natural gas accounted for about 95 percent of total U.S. exports in this sector, with Canada being the primary market; LNG exports to Japan accounted for the remaining 5 percent of total U.S. natural gas exports.

## **U.S. imports**

U.S. imports of natural gas and components decreased in 2005 by about 0.5 percent to 4.2 trillion cubic feet, of which 85 percent was pipeline natural gas and 15 percent was LNG from Trinidad and Tobago. The minimal decrease in imports is the result of fluctuations along the shared U.S.-Canadian pipeline. Canada accounted for 99 percent (3.6 billion cubic feet) of U.S. imports of pipeline natural gas in 2005, with Mexico accounting for the other 1 percent (563 million cubic feet).

**Cynthia B. Foreso**

**(202) 205-3348**

**cynthia.foreso@usitc.gov**

Table EP-5

Natural gas and components (CH006): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005<sup>1</sup>

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004	
						Absolute	Percent
Million dollars							
U.S. exports of domestic merchandise:							
Canada .....	338	523	1,285	2,176	3,171	995	45.7
Trinidad and Tobago .....	( <sup>2</sup> )	-58.4					
Saudi Arabia .....	( <sup>2</sup> )	-14.1					
Algeria .....	0	0	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>3</sup> )
Venezuela .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	3	3	1,318.4
Iraq .....	0	0	( <sup>2</sup> )	( <sup>2</sup> )	0	( <sup>2</sup> )	-100.0
Norway .....	0	( <sup>2</sup> )	-48.8				
Egypt .....	0	( <sup>2</sup> )	-36.3				
Mexico .....	510	805	430	442	589	147	33.3
United Kingdom .....	2	2	3	4	6	2	36.8
All other .....	259	344	355	283	276	-7	-2.5
Total .....	1,109	1,675	2,074	2,906	4,045	1,139	39.2
EU-15 .....	17	17	25	11	18	7	68.6
EU-25 .....	17	17	25	11	18	7	68.2
OPEC .....	1	1	1	1	4	3	254.6
Latin America .....	573	892	517	510	677	167	32.8
CBERA .....	30	58	79	62	81	19	31.3
Asia .....	171	225	240	199	175	-24	-12.1
Sub-Saharan Africa .....	( <sup>2</sup> )	3	6	6	1	-5	-90.1
Central and Eastern Europe .....	( <sup>2</sup> )	-51.9					
U.S. imports of merchandise for consumption:							
Canada .....	16,817	12,647	20,043	21,535	29,357	7,822	36.3
Trinidad and Tobago .....	532	577	1,784	2,648	3,313	665	25.1
Saudi Arabia .....	1,494	1,471	2,037	2,481	2,981	499	20.1
Algeria .....	657	470	1,010	1,677	2,712	1,035	61.7
Venezuela .....	550	764	1,116	1,554	1,995	441	28.3
Iraq .....	398	310	433	1,127	1,075	-53	-4.7
Norway .....	454	526	583	583	923	340	58.4
Egypt .....	10	14	12	40	769	729	1,801.1
Mexico .....	221	230	53	54	128	74	138.0
United Kingdom .....	403	378	578	560	666	106	19.0
All other .....	1,516	1,222	1,236	1,937	2,293	357	18.4
Total .....	23,054	18,609	28,885	34,195	46,211	12,016	35.1
EU-15 .....	446	397	646	708	738	31	4.3
EU-25 .....	446	397	648	710	744	34	4.8
OPEC .....	3,833	3,364	5,188	7,739	9,861	2,122	27.4
Latin America .....	1,795	2,017	3,102	4,436	5,803	1,366	30.8
CBERA .....	566	602	1,799	2,671	3,344	672	25.2
Asia .....	85	99	97	210	246	36	16.9
Sub-Saharan Africa .....	529	122	338	415	647	232	56.0
Central and Eastern Europe .....	0	( <sup>2</sup> )	0	0	0	0	0.0

See footnote(s) at end of table.

Table EP-5—Continued

Natural gas and components (CH006): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005<sup>1</sup>

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004	
						Absolute	Percent
Million dollars							
U.S. merchandise trade balance:							
Canada . . . . .	-16,479	-12,124	-18,758	-19,358	-26,186	-6,827	-35.3
Trinidad and Tobago . . . . .	-531	-576	-1,783	-2,647	-3,313	-665	-25.1
Saudi Arabia . . . . .	-1,494	-1,471	-2,036	-2,481	-2,981	-499	-20.1
Algeria . . . . .	-657	-470	-1,010	-1,677	-2,712	-1,035	-61.7
Venezuela . . . . .	-550	-764	-1,116	-1,554	-1,992	-438	-28.2
Iraq . . . . .	-398	-310	-433	-1,127	-1,075	53	4.7
Norway . . . . .	-454	-526	-583	-583	-923	-340	-58.4
Egypt . . . . .	-10	-14	-12	-40	-769	-729	-1,810.4
Mexico . . . . .	289	575	377	388	461	73	18.8
United Kingdom . . . . .	-401	-376	-575	-555	-660	-105	-18.8
All other . . . . .	-1,258	-878	-880	-1,654	-2,018	-364	-22.0
Total . . . . .	-21,944	-16,934	-26,811	-31,289	-42,166	-10,877	-34.8
EU-15 . . . . .	-429	-381	-622	-697	-720	-23	-3.3
EU-25 . . . . .	-429	-381	-623	-699	-725	-26	-3.8
OPEC . . . . .	-3,831	-3,363	-5,187	-7,738	-9,857	-2,119	-27.4
Latin America . . . . .	-1,222	-1,126	-2,585	-3,926	-5,126	-1,199	-30.5
CBERA . . . . .	-536	-544	-1,721	-2,610	-3,262	-653	-25.0
Asia . . . . .	86	126	143	-11	-71	-60	-525.2
Sub-Saharan Africa . . . . .	-529	-119	-332	-409	-646	-237	-58.0
Central and Eastern Europe . . . . .	( <sup>2</sup> )	-51.9					

<sup>1</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>2</sup>Less than \$500,000.

<sup>3</sup>Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2005.

Source: Compiled from official statistics of the U.S. Department of Commerce.

## **Bibliography (Energy and Related Products)**

---

U.S. Department of Energy (DOE), Energy Information Administration, *Short-Term Energy Outlook*, March 2006.

**Table EP-6**  
**Energy-related products : U.S. trade for industry/commodity groups and subgroups, 2001-2005<sup>1</sup>**

USITC code <sup>2</sup>	Industry/commodity group	2001	2002	2003	2004	2005	Change, 2005 from 2004	
							Absolute	Percent
				<i>Million dollars</i>				
CH001	Electrical energy:							
	Exports .....	1,258	304	716	829	1,039	210	25.3
	Imports .....	2,681	1,160	1,382	1,261	2,479	1,218	96.6
	Trade balance .....	-1,423	-857	-666	-432	-1,440	-1,008	-233.1
CH002	Nuclear materials:							
	Exports .....	1,239	1,510	1,551	1,575	1,562	-13	-0.8
	Imports .....	2,036	2,144	2,892	2,625	3,175	550	21.0
	Trade balance .....	-797	-635	-1,341	-1,050	-1,613	-564	-53.7
CH003	Coal, coke, and related chemical products:							
	Exports .....	2,354	2,188	2,360	3,556	4,318	761	21.4
	Imports .....	2,411	2,589	3,217	5,555	6,316	761	13.7
	Trade balance .....	-57	-401	-857	-1,998	-1,998	( <sup>3</sup> )	( <sup>4</sup> )
CH004	Crude petroleum:							
	Exports .....	177	92	155	265	627	362	136.5
	Imports .....	49,673	54,704	73,527	100,338	137,331	36,993	36.9
	Trade balance .....	-49,496	-54,612	-73,372	-100,073	-136,704	-36,632	-36.6
CH005	Petroleum products:							
	Exports .....	8,936	8,662	9,783	12,651	18,302	5,651	44.7
	Imports .....	34,372	30,594	37,280	51,579	77,684	26,105	50.6
	Trade balance .....	-25,436	-21,931	-27,497	-38,928	-59,382	-20,454	-52.5
CH006	Natural gas and components:							
	Exports .....	1,109	1,675	2,074	2,906	4,045	1,139	39.2
	Imports .....	23,054	18,609	28,885	34,195	46,211	12,016	35.1
	Trade balance .....	-21,944	-16,934	-26,811	-31,289	-42,166	-10,877	-34.8

<sup>1</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>2</sup>This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes

<sup>3</sup>Less than \$500,000.

<sup>4</sup>Less than 0.05 percent.

Note.—Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table EP-7

Energy-related products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2001–2005

USITC code	Industry/commodity group	2001	2002	2003	2004	2005	Percent change, 2005 from 2004
CH001	Electrical energy:						
	Number of establishments .....	3,225	3,225	3,225	3,225	3,225	0.0
	Employees (thousands) .....	( <sup>1</sup> )					
	Capacity utilization (percent) .....	100	100	100	100	100	0.0
	U.S. shipments (million dollars) .....	220,824	229,664	340,400	316,600	320,300	1.2
	U.S. exports (million dollars) .....	1,258	304	716	829	1,039	25.3
	U.S. imports (million dollars) .....	2,681	1,160	1,382	1,261	2,479	96.6
	Apparent U.S. consumption (million dollars) .....	222,247	230,521	341,066	317,032	321,740	1.5
	Trade balance (million dollars) .....	-1,423	-857	-666	-432	-1,440	-233.1
	Ratio of imports to consumption (percent) .....	1.2	0.5	0.4	0.4	0.8	100.0
	Ratio of exports to shipments (percent) .....	0.6	0.1	0.2	0.3	0.3	0.0
CH003	Coal, coke, and related chemical products:						
	Number of establishments .....	520	520	520	520	520	0.0
	Employees (thousands) .....	150.0	150.0	150.0	150.0	150.0	0.0
	Capacity utilization (percent) .....	90	90	90	90	90	0.0
	U.S. shipments (million dollars) .....	34,320	38,496	36,582	35,120	50,300	43.2
	U.S. exports (million dollars) .....	2,354	2,188	2,360	3,556	4,318	21.4
	U.S. imports (million dollars) .....	2,411	2,589	3,217	5,555	6,316	13.7
	Apparent U.S. consumption (million dollars) .....	34,377	38,897	37,439	37,118	52,298	40.9
	Trade balance (million dollars) .....	-57	-401	-857	-1,998	-1,998	0.0
	Ratio of imports to consumption (percent) .....	7.0	6.7	8.6	15.0	12.1	-19.3
CH004	Crude petroleum:						
	Number of establishments .....	18,000	18,000	18,000	18,000	18,000	0.0
	Employees (thousands) .....	204.0	204.0	204.0	204.0	204.0	0.0
	Capacity utilization (percent) .....	100	100	100	100	100	0.0
	U.S. shipments (million dollars) .....	46,960	55,203	57,550	73,334	100,290	36.8
	U.S. exports (million dollars) .....	177	92	155	265	627	136.5
	U.S. imports (million dollars) .....	49,673	54,704	73,527	100,338	137,331	36.9
	Apparent U.S. consumption (million dollars) .....	96,456	109,815	130,922	173,407	236,994	36.7
	Trade balance (million dollars) .....	-49,496	-54,612	-73,372	-100,073	-136,704	-36.6
	Ratio of imports to consumption (percent) .....	51.5	49.8	56.2	57.9	57.9	0.0
	Ratio of exports to shipments (percent) .....	0.4	0.2	0.3	0.4	0.6	50.0

See footnote(s) at end of table.

Table EP-7—Continued

Energy-related products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2001–2005

USITC code	Industry/commodity group	2001	2002	2003	2004	2005	Percent change, 2005 from 2004
CH005	Petroleum products:						
	Number of establishments .....	190	190	190	190	190	0.0
	Employees (thousands) .....	75.0	75.0	75.0	75.0	75.0	0.0
	Capacity utilization (percent) .....	90	90	90	90	90	0.0
	U.S. shipments (million dollars) .....	140,162	193,710	200,475	280,500	346,800	23.6
	U.S. exports (million dollars) .....	8,936	8,662	9,783	12,651	18,302	44.7
	U.S. imports (million dollars) .....	34,372	30,594	37,280	51,579	77,684	50.6
	Apparent U.S. consumption (million dollars) .....	165,598	215,641	227,972	319,428	406,182	27.2
	Trade balance (million dollars) .....	-25,436	-21,931	-27,497	-38,928	-59,382	-52.5
	Ratio of imports to consumption (percent) .....	20.8	14.2	16.4	16.1	19.1	18.6
	Ratio of exports to shipments (percent) .....	6.4	4.5	4.9	4.5	5.3	17.8
CH006	Natural gas and components:						
	Number of establishments .....	( <sup>1</sup> )					
	Employees (thousands) .....	200.0	200.0	200.0	200.0	200.0	0.0
	Capacity utilization (percent) .....	80	80	80	80	80	0.0
	U.S. shipments (million dollars) .....	150,000	115,000	165,000	174,000	150,380	-13.6
	U.S. exports (million dollars) .....	1,109	1,675	2,074	2,906	4,045	39.2
	U.S. imports (million dollars) .....	23,054	18,609	28,885	34,195	46,211	35.1
	Apparent U.S. consumption (million dollars) .....	171,944	131,934	191,811	205,289	192,546	-6.2
	Trade balance (million dollars) .....	-21,944	-16,934	-26,811	-31,289	-42,166	-34.8
	Ratio of imports to consumption (percent) .....	13.4	14.1	15.1	16.7	24.0	43.7
	Ratio of exports to shipments (percent) .....	0.7	1.5	1.3	1.7	2.7	58.8

<sup>1</sup> Not available.

Note.—Calculations based on unrounded data.

Source: These data have been estimated by the Commission's international trade analysts on the basis of primary and secondary data sources including discussions with various Government and industry contacts. These estimated data are subject to change either from secondary sources or from detailed surveys the Commission often conducts in the course of statutory investigations or other work. Further, these data may undergo adjustments based on revisions in tariff nomenclature, classification practices, or redefinitions of industry classes.